



MARINE ENVIRONMENT PROTECTION COMMITTEE 44th session Agenda item 3 MEPC 44/3 10 November 1999 Original: ENGLISH

#### HARMFUL EFFECTS OF THE USE OF ANTI-FOULING PAINTS FOR SHIPS

# Report of the Anti-fouling Paints Working Group at MEPC 43 and the Draft Text of the Legal Instrument

#### **SUMMARY**

**Executive summary:** This paper provides a summary of the deliberations of the anti-fouling

paints working group meeting during the 43<sup>rd</sup> session of MEPC. The Annex to this document contains the full text of the draft legal instrument on anti-fouling paints as it currently stands, including the

changes made by the working group at its last meeting.

Action to be taken: Paragraph 11

Related documents: MEPC 43/3/2, MEPC 43/WP.13 and MEPC 43/21 (paragraphs 3.1

to 3.27).

## 1 Introduction

- 1.1 The Working Group met from 28 June to 1 July 1999 under the Chairmanship of Mr. Bryan Wood-Thomas (United States). Delegates from Australia, Bahamas, Barbados, Belgium, Canada, China, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Italy, Japan, Liberia, the Marshall Islands, the Netherlands, Norway, Panama, Philippines, Republic of Korea, Russian Federation, Sweden, the United Kingdom, and the United States, and observers from the EC, ICS, BIMCO, ILA, CEFIC, OCIMF, FOEI, ICOMIA, AWES, INTERTANKO, SIGTTO, GREENPEACE INTERNATIONAL, ICCL, WWF, IPTA and ISAF participated.
- 1.2.1 The Group had before it the following documents: MEPC 43/3 (Netherlands), MEPC 43/3/1 (ISO), MEPC 43/3/2 (United States), MEPC 43/3/3 (Japan), MEPC 43/3/4 and MEPC 43/INF.14 (WWF), MEPC 43/3/5 (CEFIC), MEPC 43/3/6 (Marshall Islands), MEPC 43/3/7 (FOEI), MEPC 43/3/8 (FOEI), MEPC.43/3/8 (Norway), MEPC43/3/9 (BIMCO, INTERCARGO, ICS, INTERTANKO, OCIMF, SIGOTTO), and MEPC 43/INF.19 (Germany).

## **2** Committee Instructions to the Working Group

- 2.1 The Group was instructed to:
  - .1 develop a draft free-standing global legally binding instrument for anti-fouling systems used for ships.

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- .2 assess the feasibility of developing a draft text of the legal instrument by the 45th session of MEPC in March 2000; and provide recommendations to plenary on the timing of the Diplomatic Conference and necessary arrangements for preparation of the draft text of the legally binding instrument, taking into account the request by the 82nd session of the Council that Diplomatic Conferences should only be held when preparatory work is such as to assure their success; and
- .3 introduce all papers not considered at plenary.
- 2.2 Having discussed the documents submitted by the Netherlands (MEPC 43/3), the United States (MEPC 43/3/2), Japan (MEPC 43/3/3), and Norway (MEPC 43/3/8), the Committee further instructed the Group to:
  - .1 use the framework and the basic text contained in the document submitted by the United States (MEPC 43/3/2) as a basis for developing the global legally binding instrument:
  - .2 investigate the Norwegian proposal of including a new article on notification of antifouling systems in the draft global legally binding instrument (MEPC 43/3/8);
  - .3 investigate the feasibility of having only one annex listing the restricted anti-fouling systems in the instrument;
  - .4 consider whether it agrees with the proposed process for reviewing proposals to control selected anti-fouling systems and amending the controls of anti-fouling systems as outlined in article 5 of MEPC 43/3/2 and whether it agrees with the proposal contained in document MEPC 43/3 of compiling a list of "approved anti-fouling systems based on the findings of a number of States where the registration of selected anti-fouling systems is addressed through domestic legislation;
  - .5 consider whether a definition of "fouling" should be included in the legal instrument;
  - .6 consider administrative requirements appropriate for application on small vessels; and
  - .7 investigate the matter of responsibilities for enforcement, whether this should be done by the port States or flag States.
- 2.3 Recognizing the instructions of the Committee, the Group decided to discuss the following issues before focusing on an article by article review of the draft text for the global legally binding instrument, as contained in document MEPC 43/3/2, and dealing with matters related to the Diplomatic Conference:
  - .1 overview of the basic framework and draft text of the global legally binding instrument as contained in the document by the United States (MEPC 43/3/2);
  - .2 methodology for considering alternative anti-fouling systems;
  - .3 inclusion of a notification system as outlined in MEPC 43/3/8;
  - .4 determination of leaching rates as outlined in the ISO document (MEPC 43/3/1).

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# 3 Overview of the framework and the basic draft text of the global legally binding instrument

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- 3.1 The Group considered the draft framework and the text of the legal instrument contained in the document by the United States (MEPC 43/3/2) to be a good starting point for preparing a global legally binding instrument and agreed that the text (including changes made in the course of the Group's deliberations) should be used as the base document for further development of the global instrument.
- 3.2 The Group noted that the draft instrument contained in document MEPC 43/3/2 applies to vessels undertaking international voyages and that vessels engaged solely in coastal and domestic voyages are excluded from direct application of this instrument. The Group also noted that vessels, such as fishing vessels which undertake journeys outside the national jurisdictions would fall into a grey area. After discussing the advantages and disadvantages associated with application to vessels engaged in international voyages versus application to all ships, it was agreed that further consideration of this matter would be necessary in future sessions.

# 4 Methodology for considering alternative anti-fouling systems

- 4.1 Having discussed documents MEPC 43/3/5 and MEPC 43/3/7, relating to the methodology for considering alternative anti-fouling systems, the Group considered the feasibility of utilizing a single list of restricted anti-fouling systems as proposed in document MEPC 43/3/2, versus undertaking an assessment of all anti-fouling systems (or active biocides) to compile a list of restricted and "allowable" systems. The vast majority of the Group was in favour of limiting the Group's effort to the creation of a restricted list, as developing and managing a comprehensive list would be time consuming and impractical in the opinion of many States.
- 4.2 Some members of the Group disagreed with this view, but in the light of the majority view, the Group concluded that it would work with the approach outlined in document MEPC 43/3/2. Under this approach, one or more parties to the agreement must submit specific information to the organization to trigger consideration of whether international (global) restrictions are warranted for a specific anti-fouling system.
- 4.3 In view of the majority support for a restricted list, the delegate from the Netherlands decided to withdraw the proposal contained in their document (MEPC 43/3) regarding the compilation of a list of approved anti-fouling systems based on the findings of a number of States where the registration of selected anti-fouling systems is addressed through domestic legislation.

## 5 Inclusion of a notification system in the instrument

5.1 Regarding the proposal on notification outlined in MEPC 43/3/8, the Group agreed that this would be most efficiently accomplished by requiring a limited set of information in the international anti-fouling system certificates. The specific elements to be included are: the paint manufacturer's name, anti-fouling paint product name (trade name), active ingredient(s), and CAS number.

## 6 Determination of leaching rates as outlined in ISO document (MEPC 43/3/1)

6.1 The Group noted the progress made by the ISO Working Group set up following the request of MEPC for ISO to develop an international standard method for measuring leaching rates of biocides from anti-fouling systems, as outlined in document MEPC 43/3/1. Having considered the request from ISO for the Committee to provide guidance to the ISO as to whether it wishes ISO to continue its work related to its work on determining the leaching rate of tin-based anti-fouling paints.

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6.2 The majority of the Group considered that there was not a compelling need for ISO to continue their work on determining the leaching rate of tin-based biocides. Some members of the Group, however, saw merit in ISO continuing with this work.

## 7 Interpretation on complete prohibition of organotin-based anti-fouling systems

- 7.1 The Group in considering the issue of the interpretation of a complete ban on the presence of organotin compounds, considered whether the old coatings should be sandblasted off once a complete prohibition is effective or whether a sealant could be applied over the coating.
- 7.2 Several members of the Group expressed the view that sealing should satisfy conditions in the treaty but that technical issues regarding detection and enforcement of the treaty require further consideration on this matter for several delegations. The Chairman of the Group strongly encouraged that delegations come prepared to resolve this issue at the next session since significant operational questions are already being asked by those involved in the ship repainting business.

### 8 Modifications made to the draft text contained in document MEPC 43/3/2

- 8.1 The Group considered Articles 1, 2, 4 and 5 as well as Annex 2 and 3 of the draft text contained in document MEPC 43/3/2 and decided to make specific changes to the text as agreed within the Group. Due to time constraints, the Group was unable to review the preamble paragraphs, Article 3 and Articles 6 to 21, as well as Annexes 1 and 4. In addition, the Group was unable to address those issues identified in paragraphs 2.2.5, 2.2.6 and 2.2.7 above. The Group will address these points at its next sessions.
- 8.2 The Group agreed that the text included in MEPC 43/3/2, as modified by the Group, should serve as the base document for further development of the global instrument. It recommended that the full text including changes made during this meeting be distributed by the secretariat to facilitate further consideration by the member States during the intersessional period.
- 8.3 The full text of the draft legal instrument, including the changes made by the Group at its last meeting, is annexed to this document. Some of the Articles contained in the Annex have been left free of any proposal as these need to be drafted following future discussion in the Working Group and the Committee.

#### 9 Status of work

- 9.1 In considering the question of whether discussions are sufficiently advanced to enable completion of the work by July 2001 and whether a Conference is feasible in the 2000/2001 biennium, the majority of delegations expressed support for concluding the work of the Group in 2001. Concerns were raised by the Chairman of the Group about the early stage of our discussions and whether entry into force of the convention may be jeopardized by pressing ahead without the full support and conviction of all member States.
- 9.2 In outlining the outstanding issues in the draft instrument requiring resolution, the Group agreed that Articles 2, 6, 11 and 15 are particularly important. It was also recognized that resolution of the interpretation issue and related technical aspects of the complete prohibition of organotin compounds requires resolution as soon as possible (see paragraphs 7.1.1 and 7.1.2, above). Delegations are encouraged to provide submittals outlining their views on these issues in the intersessional period to facilitate discussion at MEPC 44. The importance of Article 17, entry into force provisions was noted, but it was also acknowledged that informal discussions may be the most productive medium for addressing this issue.

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# Summary of the issues which need to be considered by future sessions of the Working Group and the Committee

- 10.1 The following list provides some of the issues that will need to be considered by the Working Group in subsequent sessions:
  - .1 review of the preamble paragraphs, Article 3, Articles 6 to 21 and Annexes 1 and 4 of the draft legal instrument;
  - .2 decide on the applicability of the convention (paragraph 3.2);
  - .3 interpretation of the complete ban on the presence of organotin compounds and the technical requirements necessary to give effect to such a ban (paragraphs 7.1 and 7.2);
  - .4 consider whether a definition of "fouling" should be included in the legal instrument (paragraph 2.2.5);
  - .5 consider administrative requirements appropriate for application on small vessels (paragraph 2.2.6);
  - investigate the matter of responsibilities for enforcement, whether this should be done by the port States or flag States (paragraph 2.2.7);
- Delegations are invited to consider the list given above and to submit documents which will assist in furthering the development of the draft legal instrument.

#### 11 Action requested of the Committee

- 11.1 The Committee is invited to:
  - .1 approve the report in general; and
  - .2 invite the anti-fouling paints working group to continue developing the draft legal instrument based on the text found in the Annex to this document.

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# CONVENTION ON REGULATING THE USE OF SHIPBOARD ANTI-FOULING SYSTEMS THAT HAVE ADVERSE EFFECTS ON THE MARINE ENVIRONMENT

## THE PARTIES TO THIS CONVENTION,

**NOTING** that scientific studies and investigations by Parties and competent international organizations have shown that some anti-fouling systems used on ships pose a substantial risk of toxicity and other chronic impacts to ecologically and economically important marine organisms;

**NOTING IN PARTICULAR** the serious concern regarding anti-fouling systems that use organotins acting as biocides and being convinced that the introduction of such organotins into the environment must be phased-out;

**RECALLING** that Agenda 21, Chapter 17 of the Rio Declaration on Environment and Development calls upon States to take measures to reduce pollution caused by organotin compounds used in antifouling systems;

**RECALLING ALSO** that [the Marine Environment Protection Committee in Resolution MEPC.46(30) recommended that Governments, *inter alia*, consider appropriate ways to prohibit the use of tributyltin compounds in anti-fouling systems] [Note: This preambular clause could presumably be replaced with a reference to the pending IMO Assembly resolution on the need for a legal instrument];

**RECOGNIZING THE IMPORTANCE** of protecting the marine environment from adverse effects from anti-fouling systems used on ships;

**RECOGNIZING ALSO** that the use of anti-fouling systems to prevent the build-up of organisms on the surface on ships is of critical importance to efficient commerce;

**RECOGNIZING FURTHER** the need to continue to develop anti-fouling systems which are effective and environmentally safe;

**NOTING** the precautionary approach set out in Principle 15 of the Rio Declaration and referred to in Resolution MEPC.67(37) of the International Maritime Organization's Marine Environment Protection Committee;

**HAVE AGREED** as follows:

# **ARTICLE 1 General Obligations**

- 1. Each Party to this Convention undertakes to give effect to the provisions of this Convention and the Annexes thereto, in order to reduce or eliminate adverse effects on the marine environment caused by anti-fouling systems.
- 2. The Annexes form an integral part of this Convention. Unless expressly provided otherwise, a reference to this Convention constitutes at the same time a reference to its Annexes.
- 3. No provision of this Convention shall be interpreted as preventing a Party from taking, individually or jointly, more stringent measures with respect to the reduction or elimination of adverse effects of anti-fouling systems on the environment, consistent with international law.
- 4. Parties shall endeavour to cooperate for the purpose of effective implementation, compliance and enforcement of this Convention.
- 5. The Parties undertake to encourage the continued development of anti-fouling systems that are effective and environmentally safe.

#### **ARTICLE 2**

# Application

- 1. Unless otherwise specified in this Convention, this Convention shall apply to all ships that are entitled to fly the flag of a Party [and that engage in international voyages.]
- 2. This Convention shall not apply to any warships, naval auxiliary or other ships owned or operated by a Party and used, for the time being, only on government non-commercial service. However, each Party shall ensure, by the adoption of appropriate measures not impairing operations or operational capabilities of such ships owned or operated by it, that such ships act in a manner consistent, so far as is reasonable and practicable, with this Convention.
- 3. With respect to the ships of non-Parties to this Convention, Parties shall apply the requirements of the present Convention as may be necessary to ensure that no more favorable treatment is given to such ships.

#### **ARTICLE 3**

### **Definitions**

For the purposes of this Convention, unless expressly provided otherwise:

1. "Administration" means the Government of the State under whose authority the ship is operating. With respect to a ship entitled to fly a flag of a State, the Administration is the Government of that State. With respect to fixed or floating platforms engaged in exploration and exploitation of the sea-bed and subsoil thereof adjacent to the coast over which the coastal state exercises sovereign rights for the purposes of exploration and exploitation of their natural resources, the Administration is the Government of the coastal State concerned.

- 2. "Anti-fouling system" means a coating, paint, surface treatment, surface, or device that is used on a ship to control or prevent attachment of fouling organisms.
- 3. "International voyage" means a voyage by a ship entitled to fly the flag of one State to a port or offshore terminal under the jurisdiction of another State.
- 4. "Organization" means the International Maritime Organization.
- 5. "Secretary-General" means the Secretary-General of the Organization.
- 6. "Ship" means a vessel of any type whatsoever operating in the marine environment and includes hydrofoil boats, air-cushion vehicles, submersibles, floating craft, and fixed or floating platforms.

Controls on Anti-Fouling Systems

In accordance with the requirements specified in Annex 1, each Party shall prohibit and/or restrict the use of anti-fouling systems on ships that are entitled to fly its flag and to which this Convention applies, and shall take effective measures to ensure that such ships comply with those requirements.

#### ARTICLE 5

Process for Amending Controls on Anti-Fouling Systems

- 1. Any Party may propose an amendment to Annex 1 in accordance with this article.
- 2. An initial proposal shall contain the information required in Annex 2, and shall be submitted to the Organization. The Organization shall notify Parties and non-governmental organizations in consultative status with the Organization when it receives a proposal and shall make it available. The proposal shall be submitted by the Party to an appropriate body of the Organization, which shall promptly establish an expert group in accordance with article 6 to review the proposal.
- 3. If the initial proposal does not contain the information set forth in Annex 2, the expert group may invite the proposing Party to supply the missing information. The expert group shall, after having reviewed the required information, evaluate and report to the appropriate body whether the information presented supports the proposal's contention of risk.
- 4. The appropriate body, taking into account the expert group's report, shall decide whether the anti-fouling system in question warrants a more in-depth review based on the contention of risk presented in the initial proposal. If the appropriate body decides that further review is warranted, the proposing Party shall submit to the Organization a comprehensive proposal containing the information required in Annex 3, which shall be forwarded to each Party and to the expert group for further review.
- 5. The expert group shall review the comprehensive proposal along with any additional data submitted by any interested party and shall evaluate and report to the appropriate body whether the

proposal has demonstrated a potential for unreasonable risk of adverse effects on non-target organisms such that the amendment of Annex 1 is warranted. In this regard:

- (a) The expert group's review shall consist of:
  - (i) an evaluation of the association between the anti-fouling system and the adverse effects observed in the environment or through controlled studies based on the data in the proposal and any other relevant data which comes to light;
  - (ii) an evaluation of the potential risk reduction attributable to the proposed control measures and any other control measures that may be considered by the expert group;
  - (iii) consideration of available information on the technical feasibility of control measures and the cost-effectiveness of the proposal;
  - (iv) consideration of available information on other effects from the introduction of such control measures relating to:
  - the environment (including the cost of inaction, air quality);
  - shipyard health and safety concerns (effects on shipyard workers);
  - the cost to international shipping and other relevant sectors; and
  - (v) consideration of the availability of suitable alternatives.
- (b) The expert group's report shall be in writing and shall take into account each of the evaluations referred to in subparagraph (a), except that the expert group may decide not to proceed with the evaluations described in subparagraph (a)(ii) through (a)(v) if it determines after the evaluation in subparagraph (a)(j) that the proposal does not warrant further consideration.
- 6. Any decision to amend Annex 1 shall take into account the expert group's recommendation, and shall only be adopted by Parties to this Convention. A decision not to amend Annex 1 shall not preclude future submission of a new proposal with respect to a particular anti-fouling system if new evidence comes to light.

[Note: The Committee and/or Working Group may want to consider whether time limits should be specified, either in the Convention or in the terms of reference of the expert groups, for the review periods under article 5(3) and 5(5).]

## Expert Groups

- 1. The appropriate body of the Organization shall establish an ad hoc expert group to perform the review functions for each proposal submitted pursuant to article 5 of this Convention. A new expert group shall be established for each new proposal received, except, as appropriate, in those circumstances where proposals are received concurrently or where an existing review is already under way.
- 2. Any Party may participate in the deliberations of an expert group. Expert groups shall be composed of government-designated experts with expertise in environmental fate, marine biology, economic analysis, risk management, or other fields of expertise necessary to objectively review the technical merits of a proposal. Any Party participating in the expert group should draw on the technical expertise available to it in its departments or ministries.
- 3. The appropriate body of the Organization shall decide on the terms of reference, organization, and operation of the expert groups. Expert groups may hold such meetings as are required, but shall endeavor to conduct their work through written or electronic correspondence or other mediums as necessary to ensure the participation of all interested Parties.
- 4. In formulating any report or recommendation to the appropriate body of the Organization pursuant to article 5 of this Convention, an expert group shall endeavor to achieve unanimity. If unanimity is not possible, the expert group shall communicate any minority views.

## ARTICLE 7

## Scientific and Technical Research and Monitoring

- 1. The Parties shall take appropriate measures to promote and facilitate scientific and technical research on the effects of anti-fouling systems. In particular, such research should include observation, measurement, sampling, evaluation and analysis of the effects of anti-fouling systems.
- 2. Each Party shall, to further the objectives of this Convention, promote the availability of relevant information to other Parties who request it on:

scientific and technical activities undertaken in accordance with this Convention;

marine scientific and technological programs and their objectives; and

the effects observed from any monitoring and assessment programs relating to anti-fouling systems.

## Surveys

- 1. The Administration shall ensure that a ship to which this Convention applies undergoes [some type of survey regime to be developed]. The survey shall be such as to ensure that the ship's anti-fouling system fully complies with the applicable requirements of this Convention. After any survey has been completed, no change shall be made in the ship's anti-fouling system without the approval of the Administration.
- 2. Surveys of ships shall be carried out by officers duly authorized by the Administration or as provided in article 9(2)(c) of this Convention. The Administration may, however, entrust surveys required by this Convention either to surveyors nominated for that purpose or to organizations recognized by it. An Administration nominating surveyors or recognizing organizations to conduct surveys shall, as a minimum, empower any nominated surveyor or recognized organization to:
  - (a) require a ship that it surveys to comply with the provisions of Annex 1 of this Convention; and
  - (b) carry out surveys and inspections if requested by the appropriate authorities of a port State that is a Party to this Convention.

The Administration shall notify the Organization of the specific responsibilities and conditions of the authority delegated to the nominated surveyors or recognized organizations, for circulation to the Parties.

3. When the Administration, a nominated surveyor, or a recognized organization determines that the ship's anti-fouling system does not conform either to the particulars of a certificate required under article 9 of this Convention or to the requirements of this Convention, it shall ensure that corrective action is taken immediately to bring the ship into compliance. A surveyor or organization shall also in due course notify the Administration of any such determination. If the required corrective action is not taken, the Administration shall be notified immediately, and it shall ensure that the certificate is not issued or is withdrawn as appropriate. If the ship is in the port of another Party, the appropriate authorities of the port State shall be notified immediately. When an officer of the Administration, a nominated surveyor, or a recognized organization has notified the appropriate authorities of the port State, the Government of the port State concerned shall give such officer, surveyor or organization any necessary assistance to carry out their obligations under this article, including any action described in article 11 of this Convention.

#### **ARTICLE 9**

## Placards and Certificates

1. The Administration shall ensure that a ship [of less than 500 gross tons] to which this Convention applies shall display, in the primary onboard storage space for paints, coatings or other equipment related to the anti-fouling system employed on the ship, a placard which notifies the officers and crew of those anti-fouling systems whose use is prohibited or restricted. The placard shall be written in the working language of the officers and in English, French or Spanish.

2. The Administration shall ensure that a ship [of 500 gross tons or greater] to which this Convention applies is issued an International Anti-fouling System Certificate after successful completion of a survey in accordance with article 8 of this Convention. A certificate issued under the authority of a Party to this Convention shall be accepted by the other Parties and regarded for all purposes covered by this Convention as having the same validity as a certificate issued by them.

The certificate shall be drawn up in the official language of the issuing Party, in the form set forth in Annex 4. If the language used is neither English nor French, the text shall include a translation into one of these languages.

Certificates shall be issued either by the Administration or by any person or organization duly authorized by it. In every case, the Administration assumes full responsibility for the certificate.

At the request of the Administration, another Party to this Convention may cause a ship to be surveyed and, if satisfied that the provisions of the Convention have been complied with, shall issue or authorize the issuance of a certificate in accordance with this Convention. A certificate so issued shall contain a statement that it has been issued at the request of the Administration and it shall have the same force and receive the same recognition as a certificate issued by the Administration.

- (a) Certificates issued shall remain valid while the anti-fouling system described in the certificate remains employed by the ship. A certificate shall cease to be valid if alterations have been made in the condition or operation of the anti-fouling system described in a certificate, unless such alterations are approved by the Administration.
- (b) No International Anti-fouling System Certificate shall be issued to a ship which is entitled to fly the flag of a State which is not a Party.

#### **ARTICLE 10**

#### **Violations**

- 1. Any violation of the requirements of this Convention shall be prohibited and sanctions shall be established therefor under the law of the Administration of the ship concerned wherever the violation occurs. If the Administration is informed of such a violation, it shall investigate the matter, and may request the reporting Party to furnish additional evidence of the alleged violation. If the Administration is satisfied that sufficient evidence is available to enable proceedings to be brought in respect of the alleged violation, it shall cause such proceedings to be taken as soon as possible, in accordance with its laws. The Administration shall promptly inform the Party that reported the alleged violation, as well as the Organization, of any action taken. If the Administration has not taken any action within [1 year], it shall so inform the Party which reported the alleged violation.
- 2. Any violation of the requirements of the present Convention within the jurisdiction of any Party shall be prohibited and sanctions shall be established therefore under the law of that Party. Whenever such a violation occurs, that Party shall either:
  - (a) cause proceedings to be taken in accordance with its law; or

- (b) furnish to the Administration of the ship concerned such information and evidence as may be in its possession that a violation has occurred.
- 3. The penalties provided for by the laws and regulations of a Party for vessels entitled to fly its flag shall be adequate in severity to discourage violations of this Convention wherever they occur.

## Inspections of Ships and Detection of Violations

- 1. A ship to which this Convention applies may, in any port or offshore terminal of a Party, be subject to inspection by officers appointed or authorized by that Party for the purpose of determining whether the ship is in compliance with the applicable provisions of this Convention. Unless there are clear grounds for believing that a ship is in violation of the applicable provisions of this Convention, any such inspection shall be limited to:
  - (a) verifying that there is onboard a valid Certificate or Placard; and/or
  - (b) a brief inspection of the ship's anti-fouling system that does not affect the integrity, structure, or operation of the anti-fouling system.
- 2. If the ship is detected to be in violation of this Convention, the Party carrying out the inspection may take steps to dismiss or exclude the ship from its ports. A Party taking such action against a ship for the reason that the ship does not comply with the provisions of this Convention, shall immediately inform the consul or diplomatic representative of the Party whose flag the ship is entitled to fly, or if this is not possible, the Administration of the ship concerned.
- 3. Parties shall cooperate in the detection of violations and the enforcement of the provisions of this Convention. A Party may also inspect a ship when it enters the ports or offshore terminals under its jurisdiction, if a request for an investigation is received from any Party, together with sufficient evidence that a ship is operating or has operated in violation of a provision in this Convention. The report of such investigation shall be sent to the Party requesting it and to the competent authority of the Administration of the ship concerned so that the appropriate action may be taken under this Convention.

## **ARTICLE 12**

## Undue Delay to Ships

- 1. All possible efforts shall be made to avoid a ship being unduly detained or delayed under articles 8-11 of this Convention.
- 2. When a ship is unduly detained or delayed under articles 8-11 of this Convention, it shall be entitled to compensation for any loss or damage suffered.

Dispute Settlement

[To be developed.]

## **ARTICLE 14**

## **Duties of the Organization**

- 1. The Organization shall be responsible for the Secretariat duties in relation to this Convention.
- 2. Secretariat duties necessary for the administration of this Convention include:
  - (a) conveying to the Parties concerned all notifications received by the Organization in accordance with this Convention;
  - (b) [....other provisions to be developed....]

#### **ARTICLE 15**

#### Amendments

[To be developed. Consistent with article 5, this article would contain a provision stating that the proposal and adoption of amendments to Annex 1 would be in accordance with article 5.]

#### **ARTICLE 16**

Signature, Ratification, Acceptance, Approval, and Accession

- 1. This Convention shall be open for signature by any State at the Headquarters of the Organization from \_\_ to \_\_ and shall thereafter remain open for accession by any State.
- 2. States may become Parties to this Convention by:
  - (a) signature not subject to ratification, acceptance, or approval; or
  - (b) signature subject to ratification, acceptance, or approval, followed by ratification, acceptance, or approval; or
  - (a) accession.
- 3. Ratification, acceptance, approval, or accession shall be effected by the deposit of an instrument to that effect with the Secretary-General.

Entry Into Force

[To be developed.]

## **ARTICLE 18**

Withdrawal

- 1. Any Party may withdraw from this Convention at any time after the expiry of [two] years from the date on which this Convention enters into force for that Party.
- 2. Withdrawal shall be effected by the written notification to the Depositary, to take effect one year after receipt or such longer period as may be specified in that notification.

#### **ARTICLE 19**

## Depositary

- 1. This Convention shall be deposited with the Secretary-General, who shall transmit certified copies of this Convention to all States which have signed this Convention or acceded thereto.
- 2. In addition to the functions specified elsewhere in this Convention, the Secretary-General shall:
  - (a) inform all States which have signed this Convention or acceded thereto of:
  - (i) each new signature or deposit of an instrument of ratification, acceptance, approval or accession, together with the date thereof;
  - (ii) the date of entry into force of the Convention; and
  - (iii) the deposit of any instrument of withdrawal from this Convention, together with the date on which it was received and the date on which the withdrawal takes effect.
  - (b) as soon as this Convention enters into force, transmit the text thereof to the Secretariat of the United Nations for registration and publication in accordance with Article 102 of the Charter of the United Nations.

## Relationship to International Law and Other Agreements

Nothing in this Convention shall prejudice the rights and obligations of any State under customary international law as reflected in the United Nations Convention on the Law of the Sea or under any existing international agreement.

#### **ARTICLE 21**

Authentic Texts

This Convention is established in a single original in the Arabic, Chinese, English, French, Russian, and Spanish languages, each text being equally authentic.

IN WITNESS WHEREOF the undersigned being duly authorized by their respective Governments for that purpose have signed this Convention.

DONE AT LONDON, this ... day of ..., two thousand.

# CONTROLS ON ANTI-FOULING SYSTEMS

<b>Anti-Fouling System</b>	<b>Control Measure</b>	Application	<b>Effective Date</b>
Organotin compounds which act as biocides.	Ships shall not apply or re-apply such compounds.	All ships	1 January 2003, or entry into force of Convention, whichever is later
Organotin compounds which act as biocides.	Ships shall not bear such compounds on their hulls or external parts or surfaces.	All ships	1 January 2008, or entry into force of Convention, whichever is later

## REQUIRED ELEMENTS FOR AN INITIAL PROPOSAL

- 1. An initial proposal shall include adequate documentation containing at least the following information:
  - (a) Identity of the anti-fouling system addressed in the proposal: name of the anti-fouling system; name of active ingredient, component, or subcategory of the system which is suspected of causing the adverse effects of concern;
  - (b) Characterization of the information which suggests that the anti-fouling system or its degradation products can cause adverse effects in non-target organisms or bioaccumulate significantly in organisms at concentrations likely to be found in the environment, e.g., the results of toxicity studies on representative species and bioaccumulation data;
  - (c) Material supporting the potential of the toxic components in the anti-fouling system or its degradation products to occur in the environment at concentrations which could result in adverse effects to non-target organisms or the water quality, e.g., data on persistence in the water column, sediments and biota, and the release rate of toxic components in studies or under actual use conditions, and monitoring data (if available);
  - (d) An analysis of the association between the anti-fouling system, the related adverse effects, bioaccumulation, and the environmental concentrations observed or anticipated; and
  - (e) A preliminary recommendation on the type of restrictions that could be effective in reducing the risks associated with the anti-fouling system.
- 2. An initial proposal shall be submitted in accordance with rules and procedures of the Organization.

## REQUIRED ELEMENTS OF A COMPREHENSIVE PROPOSAL

- 1. A comprehensive proposal shall include adequate documentation containing the following information:
  - (a) any developments in the data cited in the initial proposal;
  - (b) findings from the categories of data set out in subparagraphs 2(a) and 2(b), as appropriate depending on the subject of the proposal;
  - (c) a summary of the results of studies conducted on the adverse effects of the antifouling system;
  - (d) if any monitoring has been conducted, a summary of the results of that monitoring, including information on ship traffic and a general description of the area monitored;
  - (e) a summary of the available data on environmental or ecological exposure and any estimates of environmental concentrations developed from environmental fate parameters through the application of mathematic models;
  - (f) an evaluation of the association between the anti-fouling system in question, the related adverse effects, bioaccumulation, and the environmental concentrations, either observed or expected;
  - (g) a qualitative statement of the level of uncertainty in the evaluation referred to in subparagraph (f) above; and
  - (h) a recommendation of specific control measures to reduce the risks associated with the anti-fouling system.
  - (i) a summary of the results of studies on available information specifying the effects relating to air quality, shipyard conditions, international shipping, other relative sectors as well as the availability of suitable alternatives.
- 2. For purposes of subparagraph 1(a) above, the relevant categories of data may include, as appropriate:
  - (a) Data on environmental fate and effects:

## Solubility

Modes of degradation/dissipation

- Persistence in the relevant media (e.g.,freshwater/saltwater/water column/sediments/biota)
- Sediments/water partitioning

- Leaching rates of biocides or active ingredients
- Mass balance
- Bioaccumulation, octanol/water coefficient
- Modelling with appropriate/representative site/environmental conditions
- Validation of models with field data
- (b) Data on effects in aquatic plants, invertebrates, fish, seabirds, marine mammals, endangered species, the quality of water, the seabed or habitat of non-target organisms:
  - Acute and chronic toxicity to sensitive/representative organisms
  - Developmental and reproductive toxicity to sensitive/representative organisms
  - Endocrine disruptor effects
  - Sediment toxicity
  - Bioavailability/biomagnification/bioconcentration
  - Food chain/population effects
  - Incidents/fish kills/strandings/tissue analysis
  - Residues in seafood

# FORM OF INTERNATIONAL ANTI-FOULING SYSTEM CERTIFICATE

Sys	stems That Have Adve		rine Environment (here	Of Shipboard Anti-Fouling cinafter referred to as "the
• • • •			n of the country)	
(fu		npetent person or organ		the provisions of the
	Name of ship	Distinctive number or letters	Port of registry	Gross tonnage
	Type of anti-fouling system being used	Date it was applied	Country in which it was applied	Name of shipyard that applied it
TH	IS IS TO CERTIFY:			
1.	That the ship has b	een surveyed in accorda	nce with article 8 of the	Convention; and
2.	-	nows that the anti-fouling		mplies with the applicable
	is certificate is valid unt the Convention.	il	subject to surveys in	accordance with article 8
	ued atace of certificat			
$(D_{\ell})$	ate of issue)		nature of duly authorize issuing the certifica	
		(Seal or stamp of the au	athority, as appropriate)	

## ENDORSEMENT FOR ANNUAL AND INTERMEDIATE SURVEYS

THIS IS TO CERTIFY that a survey required by article 8 of the Convention found that the ship was in compliance with the relevant provisions of the Convention:

Annual survey:		
Signed	(Signature of duly autho	
		Place
		Date
	(Seal or stamp of the	authority, as appropriate)
Annual survey: Signed		
	(Signature of duly author	ized official)
		Place
		Date
	(Seal or stamp of the	authority, as appropriate)
Annual survey:		
bighed	(Signature of duly author	
		Place
		Date
	(Seal or stamp of the	authority, as appropriate)
Annual survey:		
Signed		(Signature of duly authorized official)
		Place
		Date
	(Seal or stamp of the	authority, as appropriate)